Amarr Company

UNDERGROUND STORAGE TANK CLOSURE ASSESSMENT

November 1989

Prepared By: Engineering Tectonics, P.A.

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Amarr

Winston-Salem, North Carolina

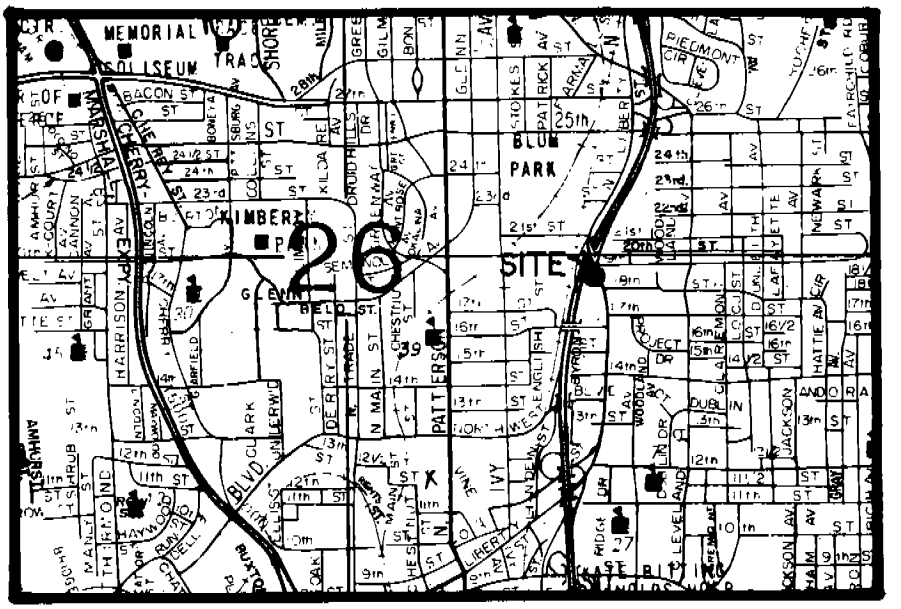
Introduction

On June 15, 1989, Brenner Iron and Metal, Inc. notified the Groundwater Section of the Division of Environmental Management (DEM), North Carolina Department of Natural Resources and Community Development of their intention to close one underground storage tank at Amarr Company in Winston-Salem, North Carolina . Acknowledgment of receipt of the notification of tank closure was issued by Ms. Emily Gloeckler of the DEM on June 19, 1989.

M & M Pump and Tank Service was retained to perform the removal of the tanks and Engineering Tectonics, P.A. (ET) was retained to perform the required assessment (40 CFR, Part 280.72) of the underground storage tank (UST) site.

Site Description

The site is located at 951 Brenner Street in Winston-Salem, North Carolina. One UST was located at the site. Figure 1 shows the location of the site. The site is paved and level.



FROM CHAMPION NATIONAL MAP CORPORATION, 1982
SCALE 1" = 2640'

SITE LOCATION

FIGURE I

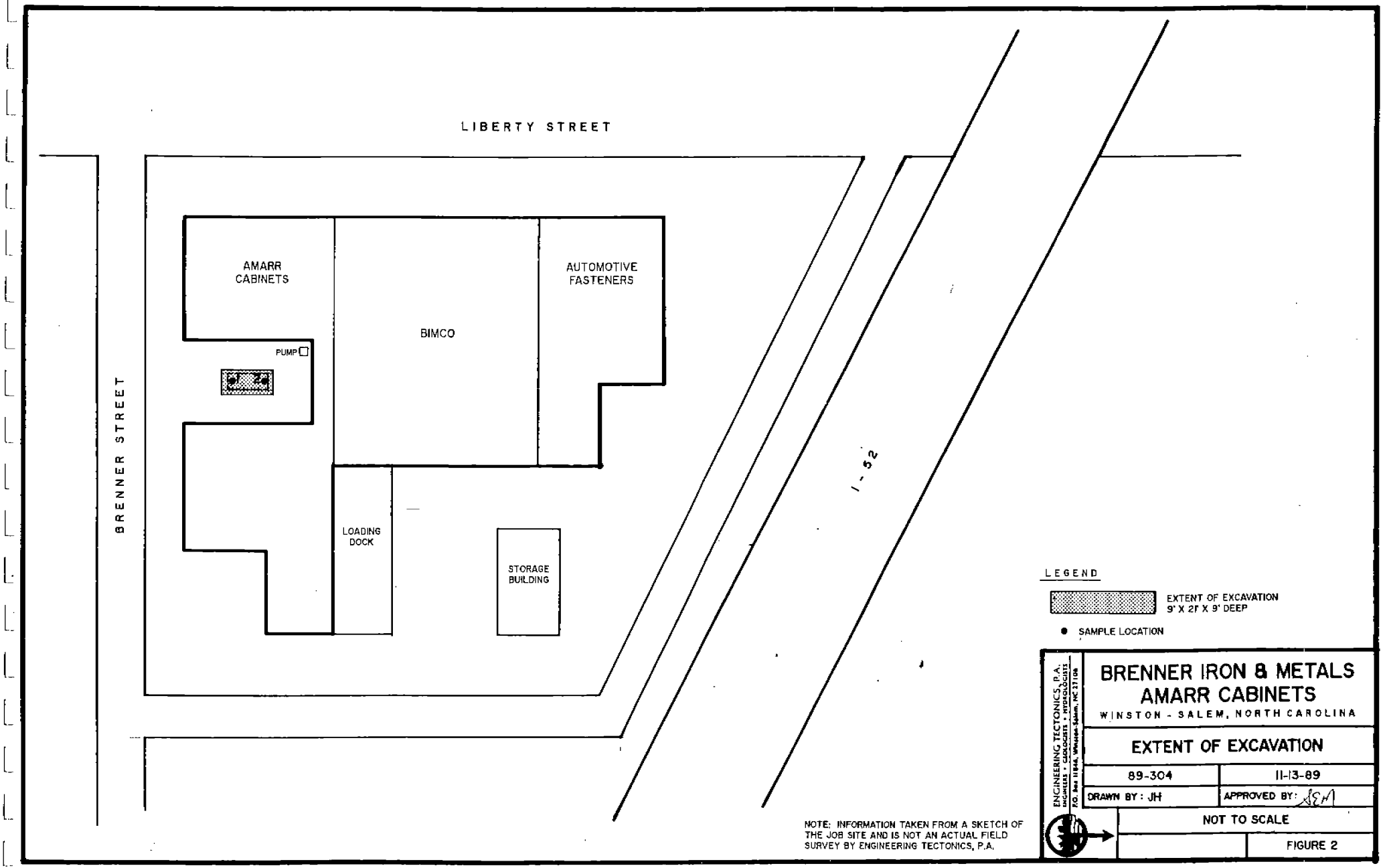
Tank Removal and Soil Sampling

The tank was excavated and removed from the site on August 22, 1989 by M & M Pump and Tank Service. Mr. Richard McClure contacted Mr. Steve Mason, P.G. of ET to inspect the tank excavation and obtain soil samples following removal of the tank. The extent of the excavation and the former location of the tank is shown in Figure 2.

The tank and lines were visually inspected and neither damage, extensive corrosion nor leaks were found. Also, there was no evidence of a petroleum hydrocarbon release detected at the site. Two soil samples were collected from the site, at the sampling locations indicated in Figure 2. Sampling locations were as follows:

Sample ID	Horizontal Location	Depth (ft)
S-1	West end of Tank	9
S-2	East end of Tank	9

Soil samples were collected by hand, following excavation and tank removal procedures. Both samples were taken from approximately one foot below the bottom of the tank. The sample collector wore clean disposable vinyl gloves for collection of


LIBERTY STREET
BRENNER STREET
AMARR CABINETS
BIMCO
AUTOMOTIVE FASTENERS
PUMP
LOADING DOCK
STORAGE BUILDING
I-52
LEGEND
EXTENT OF EXCAVATION 9' X 21' X 9' DEEP
SAMPLE LOCATION
NOTE: INFORMATION TAKEN FROM A SKETCH OF THE JOB SITE AND IS NOT AN ACTUAL FIELD SURVEY BY ENGINEERING TECTONICS, P.A.
ENGINEERING TECTONICS, P.A.
ENGINEERS • GEOLOGISTS • HYDROLOGISTS
P.O. Box 11844, Winston-Salem, NC 27116
BRENNER IRON & METALS
AMARR CABINETS
WINSTON - SALEM, NORTH CAROLINA
EXTENT OF EXCAVATION
89-304
11-13-89
DRAWN BY: JH
APPROVED BY:
NOT TO SCALE
FIGURE 2

each sample to prevent the possibility of sample cross-contamination. Immediately upon collection each sample was placed in a 150 ml amber glass container and sealed with a teflon lined polypropelene cap. The sample jars were then placed in a cooler with "blue ice" and the required chain-of-custody form was initiated. The samples were returned to our laboratory where they were packed for shipping and transported in a cooler by express courier to an EPA approved analytical laboratory.

Laboratory Analysis

Samples S-1 and S-2 were analyzed for gasoline by EPA Method 5030. Results of these analyses are included in Appendix I. No Class I Petroleum Hydrocarbons were detected at the quantitation limit of 10 milligrams per kilogram (10 parts per million).

Results and Conclusions

In our initial assessment of the site we discovered no apparent breach of integrity of the tank or lines and did not detect any odor of hydrocarbons in the backfill soils. Visual inspection and laboratory analyses of the surrounding residual soils reveal nothing to suggest that petroleum hydrocarbon products are

present. Results of laboratory analyses of two soil samples taken from residual soils below the tank location were below the detection limits for total petroleum hydrocarbons or gasoline.

In our opinion, assessment of this UST closure as required by 40 CFR, Subpart G 280.72 has shown that no release of petroleum hydrocarbons has occurred at this site and that this underground storage tank system has undergone permanent closure in accordance with 40 CFR, Subpart G 280.72.

Certification

I hereby certify that this report was prepared by me or under my direct supervision and that to the best of my knowledge all information contained herein is true and accurate.

Julianne M. Braun
Hydrogeology Technician

Steve E. Mason, P.G.
Senior Geologist

JMB/SEM/jg

APPENDIX I

AnalytiKEM An American NuKEM Company

AnalytiKEM Inc.
28 Springdale Road
Cherry Hill. NJ 08003
609/751-1122
215/923-2068

Client:	Engineering Tectonics	Date:	August 31, 1989
Address:	P.O. Box 11846 4965 Indiana Avenue Winston Salem, NC 27106	Project No.:	A60102
		Date Submitted:	August 25, 1989
Contact:	Julianne Braun	Matrix:	Nonaqueous
Project:	AMARR		

Analytical Results

Sample Designation

Constituent	Method Blank	A60102-1 S-1	A60102-2 S-2
Gasoline	10,000 U	10,000 U	10,000 U
Units	(ug/kg)	(ug/kg)	(ug/kg)

Quality Control Data

Nonaqueous Matrix Spike/Matrix Spike Duplicate Recovery Data

Constituent	Sample Spiked	Amount of Spike	Recovery MS	Recovery MSD
Gasoline	A60071-1	50	122	103
Units		(ug)	(%)	(%)

Michael Shmookler, Ph.D.
Technical Director

MS/cm

AnalytiKEM An American NuKEM Company

AnalytiKEM # 60109
Laboratory Use Only

Chain-of-Custody

Laboratory	Sales Office
2324 Vernsdale Road Rock Hill, South Carolina 29731 (803) 324-5310 Fax: (803) 324-8378	454 South Anderson Road BTC 532 Rock Hill, South Carolina 29730 (803) 329-9690 Fax: (803) 329-9689

Client: Engineering Tectonics Sample Collector: MASON

Project: AMARR AnalytiKEM Contact: Rick CANTOR

AKEM # Laboratory Use Only	SAMPLE DESIGNATION	DATE/TIME	MATRIX	Grab or Composite	40 ml vials	950 ml Org. Pres.	120 ml Unpres.	_ml HNO_3	_ml H_2SO_4	_ml NaOH	_ml HCL				PARAMETERS
	S-1	8-22					X								EPA 5030
	S-2	8-22					X								EPA 5030

I. **Field Measurements:**

Data Sheets: Y N

Filtered: Y Not Required

II. **Field Conditions/Comments:**

III. **Special Instructions:** Detection limit 10ppm - No "J" values
(Detection Limits, Data Package, etc.)

Relinquished By:	Time/Date:	Received By:	Time/Date:
Steve E Mason	8/24/89 900 hrs	Tracy Zacheis	8/25/89 1000

Reorder: PJ Associates 803-329-2300 White Laboratory Copy Yellow Client Copy AKEM #1 5/89